

ORIGINAL

OPEN MEETING AGENDA ITEM

Trico Electric Cooperative

E-01461A-11-0266



0000135581

## On-Grid PV Rebate Enrollment Form

**To be completed by the customer and the contractor**

All ON-GRID customer PV systems must meet the following requirements.

Please have your licensed contractor complete and sign this form, and submit it to Trico PRIOR to system installation.

(Place a checkmark by all items that have been completed.)

- ☒ 1. The customer's PV system components is certified as meeting the requirements of IEEE-1547 - Recommended national standards for interconnection of distributed generation.
- ☒ 2. The customer's PV system components is certified as meeting the requirements of UL-1741 - Power Conditioning Units for use distributed generation and covered by a non-prorated manufacturer's warranty of at least two years.
- ☒ 3. The customer's PV system design and installation meets all the requirements of the latest edition of the National Electrical Code (NEC), including Article 690, and all grounding, conductor, raceway, overcurrent protection, disconnect and labeling requirements.
- ☒ 4. The customer's PV system and installation shall meet the requirements of all federal, state and local building codes and shall be successfully inspected by the building official having jurisdiction. To do so, the installation shall be completed in accordance with the requirements of the latest edition of the NEC in effect in the jurisdiction where the installation is being completed, including, without limitation, Sections 200-6, 210-6, 230-70, 240-3, 250-26, 250-50, 250-122, and all of Article 690 pertaining to solar photovoltaic systems, thereof, all as amended and superseded.
- ☒ 5. The customer's PV system shall meet all of Trico's and the Arizona Corporation Commission interconnection requirements for self-generation equipment.
- ☒ 6. The customer's PV system installation shall meet Trico's Service Requirements as follows:  
*"An AC disconnect means shall be provided on all ungrounded AC conductors and shall consist of a lockable gang-operated disconnect clearly indicating open or closed. The switch shall be visually inspected to determine that the switch has a visible open. The switch shall be clearly labeled: stated "DG Service Disconnect."*
- ☒ 7. All customer PV system installations shall be completed in a professional, workmanlike and safe manner.
- ☒ 8. The rebate amount for PV systems will be: \$6,063.75  
 Rebate formula = (\$0.75) multiplied by (PV cell nameplate rating in watts) multiplied by (number of PV cells)  
 (The maximum rebate amount is 30 percent of the total cost of the system, not to include backup systems, such as batteries, battery chargers, transfer switches, etc.)

*The Arizona Corporation Commission, in Decision No. 72639, dated October 18, 2011, approved a Trico SunWatts program reduced up-front incentive for PV systems up to 10 kW. All rebate applications received after close of business on September 16, 2011, for PV systems up to 10 kW, will be subject to a reduced incentive of \$0.75 per installed Watt up to 30% of the total cost of the system.*

Contractor's Name: American Solar ElectricContractor's Company: American Solar ElectricContractor's Address: 1475 N. Scottsdale Rd. #410, Scottsdale, AZ 85258Contractor's Signature: Keith DoringContractor's Lic. Number: 168657 [K-11] Date: 9/30/2013Member's Name: ROGER WOODBURYSpouse's Name: ANITA WOODBURYMember's Address: [REDACTED] INGLEWOOD, AZ 85719-1288Member's Phone: [REDACTED]Member's Signature: [REDACTED]Spouse's Signature: Anita WoodburyDate: Dec 23, 2011Member's Email: [REDACTED]

Note: You must fill out and submit this Enrollment form for pre-approval prior to system installation. To receive the rebate, have your contractor complete, sign and submit the SunWatts System Qualification Form.

2012  
 RECEIVED  
 AZ CORP COMMISSION  
 DOCKET CONTROL  
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 85258-1288

Arizona Corporation Commission

DOCKETED

APR - 8 2012

DOCKETED BY  
 [REDACTED]

# PV System Qualification Form

**To be completed by the contractor**

## CUSTOMER INFORMATION

Customer Name: Roger Woodbury  
Customer Street Address: [REDACTED], Saddlebrook, AZ 85739  
Customer Mailing Address: Same as above  
Customer Telephone Number: [REDACTED]

## PHOTOVOLTAIC INVERTER INFORMATION

Manufacturer: SMA  
Model Number: SB7000  
Number of Units: 1  
AC Output Voltage (please check one: 120 VAC, or ☒ 120/240 VAC)  
Total AC Power Output (please check one: kVA 7.0 kW)  
Does inverter disconnect properly? YES

## PROTECTION INFORMATION

Please list the available range of protection settings, which should include pickup values and time delays.

Under/Over Voltage Protection 211-264V  
Under/Over Frequency Protection 59.3-60.5Hz  
Under/Over Current Protection 40A OCPD  
Other Protection UL1741, IEEE1547

## SYSTEM PERFORMANCE AND SOLAR ARRAY DATA

Solar Panel Manufacturer: KYOCERA KD245GX-LFB  
Solar Panel Operating DC Voltage: 29.8V  
Solar Panel Open Circuit DC Voltage: 36.9V  
Solar Panel Short Circuit DC Amperes: 8.91A  
Solar Panel Power Output DC Wattage: 245W  
Total Number of Solar Panels: 33

## PV INSTALLATION INFORMATION

The system shall will be installed in compliance with IEEE 929 Recommended Practice for Utility Interface of Photovoltaic (PV) System and the latest edition of the National Electric Code. The PV system components are listed and tested by NRTL to UL Standard 1741 and IEEE-1547.

Contractor Name (Please print): American Solar Inc.  
Contractor License Number: 168657 [k-11] (electrical), 236520 [k-42] (roofing)  
Contractor Mailing Address: 1475 N. Scottsdale Road, Suite 410, Scottsdale, AZ 85257  
Contractor Telephone Number: 480-941-7432  
Contractor Signature: Keith Doring

## DISCONNECT SWITCH

Electrician Name (please print): Keith Doring  
Electrician License Number: 168657 [k-11]  
Electrician Signature: Keith Doring

## ADDITIONAL INFORMATION

The customer must include an electrical one-line and three-line diagram of the PV installation with this form. The electrical one-line diagram must show connections, circuit breakers, fuses, etc., between main electrical components such as meter(s), main panel, disconnect switch, PV inverter(s), sub-panel, loads, etc. The customer must also include a detailed map that shows major cross roads and plant locations to enable Trico to locate the customer's PV system. A Site Plan must be submitted showing the arrangement of major equipment, including the electric service entrance section and utility meter, locations of PV inverter, interface equipment, and Disconnect Switch. The licensed electrical or PV contractor should be able to provide the electrical one-line diagram, three-line diagram, detailed map and site plan.

# System Plans Checklist

**To be completed by the contractor**

- ✓ 1. Completed Interconnection agreement
- ✓ 2. Copy of plans with the one-line and three-line diagrams that state the following:
  - Equipment shall be installed in accordance with the applicable portions of NEC article 690
  - Disconnect switch comply with NEC 690-17 and have a sign reading: "WARNING - ELECTRIC SHOCK HAZARD - DO NOT TOUCH - TERMINALS ON BOTH THE LINE AND LOAD MAY BE ENERGIZED IN OPEN POSITION"
  - Circuit Breakers in the customer's distribution panel shall will be labeled "PHOTOVOLTAIC POWER SOURCE" per NEC 705-10 and "BREAKERS ARE BACKFED" per NEC 690-64(b)5.
  - The solar output meter shall be labeled: "PHOTOVOLTAIC SYSTEM KWH METER." The Trico-accessible, outdoor-mounted, load-break disconnect switch with a visible open can be padlocked in the open position by Trico personnel; Trico personnel will install the following label: "CO-GENERATION SYSTEM UTILITY DISCONNECT SWITCH".
  - The PV array safety DC disconnect will be marked with PV source ratings per NEC 690.53.
    - (1) Operating Current
    - (2) Operating Voltage
    - (3) Maximum System Voltage
    - (4) Short-circuit Current
    - (5) Labeled "PV ARRAY DC SAFETY DISCONNECT"
- ✓ 3. PLANS indicate the Inverter brand, model and operating characteristics.
- ✓ 4. PLANS include the PV module brand and specifications.
- ✓ 5. PLANS have an overhead view of the facility (i.e., home) showing the location of the service entrance/utility meter, solar panels/wind generator, inverter, PV meter, PV safety disconnect and PV (co-generation) system utility disconnect. If the inverter is be mounted inside a garage, that fact shall be stated on the drawings.
- ✓ 6. On rooftop-mounted PV arrays, plans will show that ground-fault protection will be provided.
- ✓ 7. Estimated annual system output.

Contractor: American Solar Inc.

Signature: Keith Doring

Customer Name: Roger & Anita Woodbury

Date: 02/17/2012

For office use:

Customer/Member notified to proceed (Name of Trico Rep): \_\_\_\_\_  
Date notified: \_\_\_\_\_

# Renewable Energy Interconnection Agreement Form

By signing below, the customer agrees with Trico that the provisions of the Renewable Energy Generation Interconnection Agreement ("Agreement") when executed by Trico shall constitute a binding Agreement between the undersigned and Trico. The customer hereby assigns to Trico all associated environmental credits for the life of the customer's renewable energy generation system ("System") starting with the Trico inspection date. Customer shall not remove the System or any components thereof from the customer's premises without the express written agreement of Trico. If customer removes the System in violation of this agreement, the customer shall immediately reimburse Trico all rebates paid by Trico to customer hereunder. In the event the customer sells the premises where the System is installed, the customer's successor-in-interest shall expressly assume all of the customer's obligations hereunder in writing, and this Agreement shall not be affected, nor shall Trico's rights hereunder be disturbed in any way, including, without limitation, Trico's continued right to all Renewable Energy Credits. The rates to be paid by Trico for electricity furnished by the customer to Trico and for electricity furnished by Trico to the customer shall be those set forth in Trico's applicable Tariffs. The customer should not proceed with the renewable energy project until Trico contacts the customer and indicates approval of the information supplied by the customer on the agreement form. The customer shall not operate the System in parallel with the utility until Trico has approved the System installation and has signed below. The invoice for the project is attached (required to process rebate).

Customer/Member Name (please print): Roger Wornburg  
Member's Account Number: [REDACTED]  
Address: [REDACTED] City: Sioux Falls State: AZ Zip: 85739-1285  
Customer's Signature: [Signature]  
Date: Dec 23, 2011

By signing below, Trico Electric Cooperative, Inc., acknowledges that it has inspected and confirmed that the CREG installation has met Trico's PV Interconnection Requirements, and therefore, the customer is authorized to operate the PV system in parallel with the utility.

Authorized Trico Representative (please print): \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

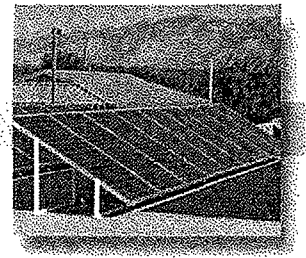
TRICO IS NOT RESPONSIBLE FOR THE PROTECTION OF THE CUSTOMER'S RENEWABLE ENERGY GENERATION SYSTEM, OR OF ANY OTHER PORTION OF THE CUSTOMER'S ELECTRICAL EQUIPMENT. THE CUSTOMER IS FULLY AND SOLELY RESPONSIBLE FOR PROTECTING THEIR EQUIPMENT IN A MANNER TO PREVENT ANY FAULTS OR OTHER DISTURBANCES FROM DAMAGING THE CUSTOMER'S EQUIPMENT.

## For Office Use:

Rebate Approved by (please print) \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Account #: 908.03  
Activity Code: 587  
REBATE AMOUNT: \$ \_\_\_\_\_

# Interconnection Requirements

## *Trico Electric Cooperative, Inc., Single-Phase 120 V or 120/240 V PV Interconnection Requirements*



### **1.0 GENERAL REQUIREMENTS**

- 1.1 The following renewable energy generation system interconnection requirements ("Interconnection Requirements") by Trico Electric Cooperative, Inc., (Trico) are the minimum requirements to ensure proper interface of single-phase 120 V or 120/240 V, renewable energy generation system ("System") with Trico. These minimum requirements are based on the IEEE Recommended Practice for Utility Interface of Residential and Intermediate Photovoltaic Systems (American National Standards Institute/Institute of Electrical & Electronic Engineers Standard 929). The customer is responsible for complying with Trico's Rules, Regulations and Line Extension Policy approved by the Arizona Corporation Commission and all other applicable technical standards, safety codes, Article 690 of the National Electric Code, equipment manufacturers' specifications related to the design, installation, operation and maintenance of the customer's entire electrical installation including the System, not specifically mentioned in this document. The System and its Components must be Listed and Tested by a National Recognized Testing Laboratory (NRTL) to Underwriters Laboratory (UL) Standard 1741.

### **2.0 AGREEMENT PROCESS**

- 2.1 The customer shall contact Trico and request the interconnection requirements and agreement form.
- 2.2 The customer shall review the interconnection requirements and return the signed and completed Agreement form to Trico. Trico will verify that the customer's System appears to be in compliance with the interconnection requirements.
- 2.3 Trico will approve the agreement form only if the customer has submitted the correct information and the customer has signed the Agreement. Trico will notify the customers and give the customer permission to proceed with the System. The customer shall not proceed with the System until Trico approves the agreement form and contacts the customer.
- 2.4 The customer shall install a Trico-accessible, outdoor-mounted, load-break disconnect switch with a visible open that is capable of being padlocked in the open position by Trico personnel. The disconnect switch shall be mounted at the service entrance next to the meter. It shall be properly grounded and clearly labeled "RENEWABLE ENERGY GENERATION SYSTEM UTILITY DISCONNECT" (label provided by Trico). The disconnect switch shall be installed on the alternating current (AC) circuit between the utility and AC input to the inverter. The purpose of the disconnect switch is for Trico, or other personnel, to disconnect the System from Trico to eliminate all potential sources of backfeed onto Trico's system when it is necessary to safely work on local area power lines or equipment. The customer understands that Trico has the right to padlock the disconnect switch in the open position at any time without notice to the customer. The customer also understands not to tamper with or remove the padlock if the disconnect switch is padlocked in the open position by Trico. The disconnect switch must be installed by a licensed electrician and inspected as set forth in this document.
- 2.5 The customer shall obtain all permits and inspections required by town, city, county and state agencies for the installation of the System and submit to Trico the original permits and proof of inspections for Trico's examination. The System shall be certified to meet the ANSI/IEEE Standard 929 by a licensed engineer and installed by a qualified licensed contractor.
- 2.6 After the System has been installed and has been inspected and approved by the town, city, county or state inspectors, the customer shall contact Trico. Trico will inspect the installation to confirm it complies with the interconnection requirements. Trico recommends the licensed contractor be on site when Trico inspects the installation to answer any questions that Trico may have.
- 2.7 After the customer has complied with the foregoing provisions, Trico has inspected the installation and has confirmed that it meets the interconnection requirements; Trico will then sign the Interconnection Agreement, which authorizes the customer to operate the System in parallel with Trico's distribution system. Note: Trico will not sign the Interconnection Agreement until steps 2.1 through 2.6 are complete. Trico will send copies of the completed Interconnection Agreement to the customer.

### **3.0 POWER QUALITY REQUIREMENTS**

- 3.1 Power quality at the customer's meter must be within published national voltage (ANSI/IEEE Standard C84.1) and harmonic (ANSI/IEEE Standard 519) standards. The System must operate in synchronism with Trico at 60 Hz. The System shall not inject direct current (DC) into Trico's alternating current (AC) system. In addition to these standards, the customer's System shall not cause any noticeable interference with telephone, radio, computer or other communication systems of Trico or any of Trico's other customers. If the customers power quality does not meet these standards or the System interferes with the power quality of other Trico customers, Trico reserves the right to disconnect the System from its distribution.
- 3.2 Trico's flicker standard is defined as: Any system or load shall not affect the voltage of other Trico customers to such an extent that the disturbance is perceived and irritating to other customers. This is approximately a 2-3 volt dip on a 120 volt basis for a very short period of time.

#### **4.0 PROTECTION REQUIREMENTS**

- 4.1 The inspections in sections 2.4, 2.5, 2.6 and 2.7 are intended to ensure that the System shall automatically disconnect from Trico's distribution system if Trico or other personnel open an upstream breaker, fuse or switch to de-energize the utility power source. Without automatic disconnection, the System could potentially back-feed and energize Trico's distribution power lines. This condition is called 'islanding' and is extremely dangerous because Trico or other personnel will have assumed that they have isolated Trico's power source and could potentially be electrocuted by the customer's System back-feeding Trico's system. It is the customer's responsibility to ensure that the System will automatically disconnect from Trico's distribution system under these conditions. The customer is liable for any damages or injuries should this condition occur. Trico recommends that the customer secure liability insurance to protect them from potential financial risk.
- 4.2 Trico transmission and distribution breakers will automatically trip open due to temporary or permanent faults (lightning strikes, etc.) and may automatically re-close. It's the customer's responsibility to ensure that the System has automatically disconnected from the utility before a Trico distribution or transmission breaker automatically recloses onto the System out of synchronism. Trico is not responsible for any damage caused by its breaker automatically opening, or reclosing on the customer's System out of synchronism.
- 4.3 The following minimum protection is required by Trico to prevent the System from islanding. The System must automatically disconnect from the utility within two seconds (120 cycles) after the voltage deviates outside a voltage range of 88-100 percent of nominal 120/240 volts. The System must automatically disconnect from the utility 0.1 second (6 cycles) after the frequency deviates outside the frequency range of 59.3-60.5 Hz. After the System has disconnected from the utility, it shall remain disconnected until voltage and frequency is within the normal voltage and frequency ranges for a minimum of 60 seconds.
- 4.4 In addition to the minimum protection required by Trico, it is the customer's responsibility to ensure that all additional personnel safety and equipment protection devices required by all other applicable technical standards, safety codes and equipment manufacturers' specifications are properly installed and operational. Trico is not responsible for the protection of the customer's System.

#### **5.0 INSPECTIONS**

- 5.1 The customer shall furnish, install, operate and maintain in good working order and repair without cost to Trico: the said System, in compliance with the plans and specifications as furnished and/or defined by the Agreement.
- 5.2 Trico may conduct an inspection at least once per year or as needed at no cost to the customer. The customer will provide Trico personnel with reasonable access to the System to conduct inspections. The inspections will consist, at a minimum, of a visual inspection of required equipment and a test to verify that the System will disconnect properly from the utility when the utility power is disconnected.

#### **6.0 EQUIPMENT PROVIDED BY THE CUSTOMER**

- 6.1 The System provided by the customer shall be in compliance with Trico's Rules, Regulations and Line Extension Policies and Tariffs as approved by the Arizona Corporation Commission.

#### **7.0 SURVEYS AND RESEARCH**

- 7.1 Trico may install service equipment and metering for surveys and research, at Trico's cost, on the customer's premises by providing notification, plans and specifications or such revisions to the customers plan and specifications.

#### **8.0 INDEMNIFICATION**

- 8.1 The customer hereby agrees to indemnify and hold harmless Trico, its directors, officers, employees, agents, and representatives and its indemnitors against and from any and all loss, damage, demands, claims or actions, including but not limited to any expenses, costs and attorneys' fees, for or on account of injury, bodily or otherwise, to or death of any persons, or damage to or destruction of property belonging to Trico or others, in any manner resulting from, or arising out of, any operations by the customer's facilities.

Trico hereby agrees to indemnify and hold harmless the customers, its directors, officers, employees, agents and representatives and its indemnitors against and from any and all loss, damage, demands, claims or actions, including but not limited to any expenses, costs and attorneys' fees, for or on account of injury, bodily or otherwise, to or death of any persons, or damage to or destruction of property belonging to Trico or others, in any manner resulting from, or arising out of any operations by Trico or its facilities.

#### **9.0 LIMITATION OF LIABILITY**

- 9.1 TRICO SHALL NOT BE LIABLE FOR ANY ACTIONS OR OMISSIONS IN ITS PERFORMANCE OF THESE INTERCONNECTION REQUIREMENTS UNLESS CAUSED BY TRICO'S GROSS NEGLIGENCE OR WILLFUL MISCONDUCT. IN NO EVENT SHALL TRICO, ITS OFFICERS, DIRECTORS, EMPLOYEES OR AGENTS BE LIABLE TO THE CUSTOMER FOR LOSS OF PROFITS OR ANY OTHER SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGE, HOWEVER CAUSED, RESULTING FROM TRICO'S PERFORMANCE HEREUNDER.

# Net Metering Tariff Application

You MUST sign up to participate in the Trico Net Metering Tariff. If you would like to take service under the Tariff, review the Net Metering Tariff (see page 18), complete the information below and return it with your application. If you do not qualify, Trico will respond to your application by sending you a notification, which will include information regarding the reason you did not qualify.

Please print:

Name: Roger Woodbury

Address: [REDACTED]

City: Snodgrass

State: AZ Zip: AZ 85739-1285

Account #: [REDACTED] Cust # [REDACTED]

By signing below, you are indicating that you have read and understand the Trico Electric Cooperative, Inc. Net Metering Tariff and wish apply to take service under this tariff.

R. Woodbury Dec 23, 2011  
Signature Date

Note: If you qualify, service under the Net Metering Tariff will begin the first day of the monthly billing cycle after receipt of your application. If you do not qualify, Trico will send you a notification, which will include the reason for disqualification.

# ORIGINAL

## ELECTRIC RATES

TRICO ELECTRIC COOPERATIVE, INC.

8600 W. Tangerine Road

Marana, Arizona 85653

Filed By: Vincent Nifido

Title: General Manager/CEO

Effective Date: January 26, 2010

### STANDARD OFFER TARIFF

#### NET METERING TARIFF SCHEDULE NM

##### Availability

Net Metering service is available to all customers of Trico Electric Cooperative, Inc. (Cooperative) with a qualifying Net Metering Facility. Participation under this schedule is subject to availability of enhanced metering and billing system upgrades. The electric energy generated by or on behalf of the customer from a qualifying Net Metering Facility and delivered to the Cooperative's distribution facilities may be used to offset electric energy provided by the Cooperative during the applicable billing period.

Net Metering Facility means a facility for the production of electricity that:

- a. Is operated by or on behalf of the customer and is located on the customer's premises;
- b. Is intended primarily to provide part or all of the customer's requirements for electricity;
- c. Uses Renewable Resources, a Fuel Cell or CHP (as defined below);
- d. Has a generating capacity less than or equal to 125% of the customer's total connected load, or in the absence of customer load data, capacity less than or equal to the customer's electric service drop capacity; and
- e. Is interconnected with and can operate in parallel and in phase with the Cooperative's existing distribution system.

Service under this tariff is available provided the rated capacity of the customer's Net Metering Facility does not exceed the Cooperative's service capacity. The customer shall comply with all of the Cooperative's interconnection standards. The customer is also required to sign and complete a net metering application prior to being provided Net Metering Service.

Net Metering Facilities with generation capacity that exceeds 1,000 kilowatts, which are interconnected presently, or desire to become interconnected, may, at Arizona Electric Power Cooperative's option, be subject to the negotiated terms and conditions set forth in multilateral contracts among the customer, Arizona Electric Power Cooperative, Southwest Transmission Cooperative and the Cooperative.

##### Metering

Metering installed for the service provided under this tariff shall be capable of registering and accumulating the kilowatt-hours (kWh) of electricity flowing in both directions in a billing period.

APPROVED FOR FILING  
DECISION #: 77462



# ORIGINAL

## NET METERING TARIFF SCHEDULE NM

### Monthly Billing

If the kWh energy supplied by the Cooperative exceeds the kWh energy that are generated by the customer's Net Metering Facility and delivered back to the Cooperative during the billing period, the customer shall be billed for the net kWh energy supplied by the Cooperative in accordance with the rates and charges under the customer's Standard Rate Schedule.

If the kWh energy generated by the customer's Net Metering Facility and delivered back to the Cooperative exceeds the kWh energy supplied by the Cooperative in the billing period, the customer shall be credited during subsequent billing periods for the excess kWh energy generated. The Cooperative shall apply the credit by using the excess kWh energy generated during the billing period to reduce the kWh energy supplied (not kW or kVA demand or customer charges) and billed by the Cooperative during the subsequent billing periods.

Customers taking service under time-of-use rates who are to receive credit in a subsequent billing period for excess kWh energy generated shall receive such credit during the following billing periods during the on- or off-peak periods corresponding to the on- or off-peak periods in which the kWh energy were generated by the customer.

Each Calendar Year, for the customer bills produced in October (September usage) or in the last billing period that the customer discontinues service under this tariff, the Cooperative shall issue a check or billing credit to customers with Net Metering Facilities for the balance of any credit due in excess of amounts owed by the customer to the Cooperative for Non-Firm Power. The payment for any remaining credits shall be at the Cooperative's Annual Average Avoided Cost. The Cooperative's Annual Average Avoided Cost shall be set at \$0.04205 per kWh. Any payment for Firm Power will be pursuant to a separate contract.

### Administrative Charge

In order to determine accurate billing and usage, net metering customers will need to have interval meter data available (minimum data collection of every half hour). This information is needed to ensure accurate billing and to calculate the net kWh energy billed or credited to the customer's account. The following table shows the incremental costs for the increased data collection applicable to all rate classes.

Administrative Charge	Monthly Rate
Monthly Data Cost	\$3.38

APPROVED FOR FILING  
DECISION # 71462

# ORIGINAL

## NET METERING TARIFF SCHEDULE NM

### Definitions

1. Annual Average Avoided Cost: Defined as the average annual wholesale fuel and energy costs per kWh energy purchased from the Cooperative's wholesale power supplier during the calendar year. The Cooperative's Annual Average Avoided Cost shall be set at \$0.046205 per kWh.
2. Calendar Year: The Calendar Year is defined as October 1 through September 30, for the purpose of determining the billing credit for the balance of any credit due in excess of amounts owed by the customer to the Cooperative.
3. Renewable Resource: Means natural resources that can be replenished by natural processes, including biomass, biogas, geothermal, hydroelectric, solar or wind.
4. Combined Heat and Power or CHP: Means a system that generates electricity and useful thermal energy in a single, integrated system such that the useful power output of the facility plus one-half the useful thermal energy output during any 12-month period must be no less than 42.5 percent of the total energy input of fuel to the facility (also known as cogeneration).
5. Fuel Cell: Means a device that converts the chemical energy of a fuel directly into electricity without intermediate combustion or thermal cycles. The source of the chemical reaction must be from Renewable Resources.
6. Non-Firm Power: Electric power which is supplied by the customer's generator at the customer's option, where no firm guarantee is provided, and the power can be interrupted by the customer at any time.
7. Firm Power: Electric power available from the customer's facilities, upon demand, at all times with an expected or demonstrated reliability that is covered by a separate multiparty purchase agreement among the customer, the Cooperative, Arizona Electric Power Cooperative and Southwest Transmission Cooperative.
8. Time Periods: Mountain Standard Time shall be used in the application of this rate schedule. On-peak and off-peak time periods will be determined by the applicable Standard Rate Schedule.
9. Standard Rate Schedule: Any of the Cooperative's retail rate schedules with metered kWh charges.

APPROVED FOR FILING  
DECISION # 72462

## Antonio Gill

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From: John LeSueur on behalf of Pierce-Web  
Sent: Wednesday, March 28, 2012 11:59 AM  
To: Antonio Gill  
Subject: FW: TRICO customer  
Attachments: Woodbury\_TRICO Res\_021712.pdf

Please Docket and redact confidential information.

-----Original Message-----

From: [joy.seitz@americanpv.com](mailto:joy.seitz@americanpv.com) [<mailto:joy.seitz@americanpv.com>]  
Sent: Wednesday, March 28, 2012 11:32 AM  
To: Pierce-Web; Burns-Web; Stump-Web; Mayes-WebEmail; Newman-Web  
Subject: Fw: TRICO customer

Please see page 1 line 8.

You will see .75/watt and this is the document TRICO approves contracts with. TEP nor APS write their non-confirmed UFI contracts like this. The incentive is blank.

Joy Seitz  
Vice President - Business and Policy Development American Solar

1475 N. Scottsdale Road, Suite 410 | Scottsdale, Arizona 85257  
Direct: 480-941-7431 | Cell: 480-266-9054 | Fax: 480-994-1438  
[joy.seitz@americanpv.com](mailto:joy.seitz@americanpv.com) | [www.americanpv.com](http://www.americanpv.com)  
AZ ROC License #168657 [K-11], #236520 [K-42], #268156 [K-78]

Sent from my Verizon Wireless BlackBerry

-----Original Message-----

From: Sarah Brown <[sarah.brown@americanpv.com](mailto:sarah.brown@americanpv.com)>  
Date: Wed, 28 Mar 2012 11:27:16  
To: Joy Seitz<[joy.seitz@americanpv.com](mailto:joy.seitz@americanpv.com)>; [kojilvr@yahoo.com](mailto:kojilvr@yahoo.com)<[kojilvr@yahoo.com](mailto:kojilvr@yahoo.com)>  
Subject: RE: TRICO customer

Here is the TRICO application (first page shows \$0.75/watt).

Sarah Brown  
Contracts Administrator  
American Solar

1475 N. Scottsdale Road, Suite 410 | Scottsdale, Arizona 85257  
Direct: 480-941-7432 | Fax: 480-994-1438  
[sarah.brown@americanpv.com](mailto:sarah.brown@americanpv.com) | [www.americanpv.com](http://www.americanpv.com)  
AZ ROC License #168657 [K-11], #236520 [K-42], #268156 [K-78]

-----Original Message-----

From: [joy.seitz@americanpv.com](mailto:joy.seitz@americanpv.com) [<mailto:joy.seitz@americanpv.com>]  
Sent: Wednesday, March 28, 2012 11:15 AM  
To: Sarah Brown

Subject: Re: TRICO customer

Is the .75/ watt mentioned in this?

Joy Seitz

Vice President - Business and Policy Development American Solar

1475 N. Scottsdale Road, Suite 410 | Scottsdale, Arizona 85257  
Direct: 480-941-7431 | Cell: 480-266-9054 | Fax: 480-994-1438  
[joy.seitz@americanpv.com](mailto:joy.seitz@americanpv.com) | [www.americanpv.com](http://www.americanpv.com)  
AZ ROC License #168657 [K-11], #236520 [K-42], #268156 [K-78]

Sent from my Verizon Wireless BlackBerry

-----Original Message-----

From: Sarah Brown <[sarah.brown@americanpv.com](mailto:sarah.brown@americanpv.com)>  
Date: Wed, 28 Mar 2012 10:42:19  
To: Joy Seitz<[joy.seitz@americanpv.com](mailto:joy.seitz@americanpv.com)>  
Subject: RE: TRICO customer

Here it is.

Sarah Brown  
Contracts Administrator  
American Solar

1475 N. Scottsdale Road, Suite 410 | Scottsdale, Arizona 85257  
Direct: 480-941-7432 | Fax: 480-994-1438  
[Sarah.brown@americanpv.com](mailto:Sarah.brown@americanpv.com) | [www.americanpv.com](http://www.americanpv.com)  
AZ ROC License #168657 [K-11], #236520 [K-42], #268156 [K-78]

-----Original Message-----

From: [joy.seitz@americanpv.com](mailto:joy.seitz@americanpv.com) [<mailto:joy.seitz@americanpv.com>]  
Sent: Wednesday, March 28, 2012 10:40 AM  
To: Sarah Brown  
Subject: TRICO customer

Please send me the signed contract. I will be submitting this to the Commission.

Joy Seitz

Vice President - Business and Policy Development American Solar

1475 N. Scottsdale Road, Suite 410 | Scottsdale, Arizona 85257  
Direct: 480-941-7431 | Cell: 480-266-9054 | Fax: 480-994-1438  
[joy.seitz@americanpv.com](mailto:joy.seitz@americanpv.com) | [www.americanpv.com](http://www.americanpv.com)  
AZ ROC License #168657 [K-11], #236520 [K-42], #268156 [K-78]

Sent from my Verizon Wireless BlackBerry

## Antonio Gill

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**From:** Sun Watts [sunwatts@trico.coop]  
**Sent:** Monday, February 27, 2012 1:24 PM  
**To:** Sarah Brown  
**Subject:** RE: Woodbury\_Trigo Application\_021712

Sarah,

This looks great! I will make sure this gets added to the member's file. Thank you so much for the quick turnaround. I greatly appreciate it.

Thank you,

Tanya Mitchell  
Trico Electric Cooperative  
(520) 744-2944 ext. 1524  
[Sunwatts@trico.coop](mailto:Sunwatts@trico.coop)

---

**From:** Sarah Brown [<mailto:sarah.brown@americanpv.com>]  
**Sent:** Monday, February 27, 2012 11:52 AM  
**To:** Sun Watts  
**Cc:** Ed Thorpe; Keith Doring; interconnect-help  
**Subject:** RE: Woodbury\_Trigo Application\_021712

Hi Tanya,

Attached is the Renewable Energy Credit Purchase Agreement signed by Mr. Woodbury. Please let us know if you need anything else.

Thank you,

**Sarah Brown**  
Contracts Administrator  
American Solar

1475 N. Scottsdale Road, Suite 410 | Scottsdale, Arizona 85257  
Direct: 480-941-7432 | Fax: 480-994-1438  
[Sarah.brown@americanpv.com](mailto:Sarah.brown@americanpv.com) | [www.americanpv.com](http://www.americanpv.com)  
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**From:** Sun Watts [<mailto:sunwatts@trico.coop>]  
**Sent:** Monday, February 20, 2012 2:59 PM  
**To:** Keith Doring; interconnect-help  
**Subject:** RE: Woodbury\_Trigo Application\_021712

Good afternoon Keith,

Thank you for submitting Mr. and Mrs. Woodbury's PV Rebate Application. Please note that our application has been revised. We now have separate applications for PV systems depending on whether they are leased or owned by the member. Also, we have also revised our Renewable Energy Credit Purchase Agreement. I will need you to have the

member sign this agreement and submit it to me as soon as possible. Can you please begin using the revised applications attached for all rebate applications that you submit in the future?

Please feel free to contact me if you have any questions or concerns.

Thank you,

Tanya Mitchell  
Trico Electric Cooperative  
(520) 744-2944 ext. 1524  
[Sunwatts@trico.coop](mailto:Sunwatts@trico.coop)

---

**From:** Keith Doring [<mailto:keith.doring@americanpv.com>]

**Sent:** Friday, February 17, 2012 3:10 PM

**To:** Sun Watts

**Cc:** interconnect-help; Andrea Sieler

**Subject:** Woodbury\_Trigo Application\_021712

Attached is the incentive application pack for **Woodbury, Roger and Anita**

This pack includes:

- Completed Trico Application
- System drawings
- Customer Quote
- Building Permit
- Quote
- Statement of General Performance
- W-9

Please contact [interconnect-help@americanpv.com](mailto:interconnect-help@americanpv.com) with any questions

**Keith Doring**  
Residential System Designer  
American Solar

1475 N. Scottsdale Road, Suite 410 | Scottsdale, Arizona 85257

Direct: 480-941-7451 | Fax: 480-994-1698

[keith.doring@americanpv.com](mailto:keith.doring@americanpv.com) | [www.americanpv.com](http://www.americanpv.com)

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# American Solar

## Residential Photovoltaic System Quote

Quote Number 1002-10019	Quote Version A	Quote Date 08-Dec-11	Expiration Date 07-Jan-12
Client Roger Woodbury	Phone 1 [REDACTED]	Phone 2 N/A	Fax N/A
E-mail Address [REDACTED]			
Mailing Address [REDACTED] Saddlebrooke AZ 85739		Installation Address 38401 S Skyline Dr Saddlebrooke AZ 85739	
Solution Associate Ed Thorpe	Sales Office ASE-Arizona	Market Residential	Application Turn-key System
Roof type Pitched / S-Tile	Utility TRICO	Watts-STC 8,085	

QTY	DESCRIPTION	UNIT PRICE	LINE TOTAL
	<b>SYSTEM DESIGN, PERMITTING &amp; UTILITY INTERCONNECTION</b>		
1	System Design - Electrical Plans, Site Plan & Plant Location Drawing	\$ 400.00	\$ 400.00
1	Municipal / County Permit Package & Inspection Coordination	\$ 200.00	\$ 200.00
1	Utility Interconnect Application and Inspection Coordination	\$ 200.00	\$ 200.00
1	Municipal / County Building Permit (Estimate)	\$ 300.00	\$ 300.00
0	No Special Permit Requirements	\$ -	\$ -
	<b>MAJOR SYSTEM COMPONENTS</b>		
	<b>PV Module</b>		
33	Kyocera Solar KD245GX-LFB PV Module, 245 W-STC	\$ 445.90	\$ 14,714.70
0	(Additional PV Modules Not Required)	\$ -	\$ -
	<b>Inverter</b>		
1	SMA SB7000US Grid-tie Inverter, 7.0 kW-AC	\$ 3,805.00	\$ 3,805.00
0	(Additional Inverter Not Required)	\$ -	\$ -
	<b>Inverter Accessories</b>		
0	(No Accessory Selected)	\$ -	\$ -
0	(No Accessory Selected)	\$ -	\$ -
	<b>Mounting System</b>		
33	ProSolar Mounting System & Structural Attachments (per W-STC)	\$ 0.33	\$ 2,668.05
0	(No Secondary Rack Requirement)	\$ -	\$ -
	<b>INSTALLATION LABOR &amp; MATERIALS</b>		
1	Installation Labor & Project Management	\$ 5,757.38	\$ 5,757.38
1	Installation Materials (wire, hardware, conduit, switches, branch circuit kits, etc.)	\$ 2,296.75	\$ 2,296.75

### Construction Timing Estimate

We estimate\* your construction to occur between:

3/7/2012 and 5/6/2012

\* Construction date estimates are not guaranteed

### Payment Terms - Direct Purchase

Deposit**	\$ 4,476.28
Payment 2	\$ 5,968.38
Payment 3	\$ 13,333.47
Payment 4	\$ 6,063.75
<b>Total Project Cost</b>	<b>\$ 29,841.88</b>

Total - Pre Sales Tax	\$ 30,341.88
Pre-event Sunny Community Discount	\$ 500.00
Tax Authority	City-Final
Sales Tax Rate	0.0000%
Sales Tax	\$ -
<b>Total Project Cost</b>	<b>\$ 29,841.88</b>
Project Cost per W-STC	\$ 3.69
Estimated Utility REC Purchase Payment†	\$ 6,063.75
<b>Estimated Out-of-Pocket Cost</b>	<b>\$ 23,778.13</b>
Less Federal Tax Credit	\$ 8,952.56
Less Arizona Tax Credit	\$ 1,000.00
<b>System Cost After Tax Credits*</b>	<b>\$ 13,825.56</b>
Cost per W-STC*	\$ 1.71

\* Consult your tax advisor regarding taxable income associated with Utility REC Purchase Payment. REC Payments subject to change and funding availability, per Utility. See the Savings Page of your quote to estimate the net system cost adjusted for anticipated increase in taxable income.

Customer: [Signature]

Date: Dec 23, 2011

### AMERICAN SOLAR

1475 N. Scottsdale Rd., Ste. 410, Scottsdale, Arizona, 85257  
480.994.1440 Fax: 480.994.1438  
2539 N. Balboa Ave., Suite 115, Tucson, Arizona, 85705  
520.884.4291 Fax: 520.624.1226  
Arizona ROC Licenses: #168657 (K-11), #236520 (K-42), #268156 (K-78)

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**ARIZONA**

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A+ Rating